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# PATENT ABSTRACTS OF JAPAN

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## (54) OPTICAL TRANSMITTER

## (57)Abstract:

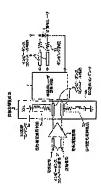
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PROBLEM TO BE SOLVED: To secure a predetermined eye mask margin in an optical transmitter without depending on a transmission speed.

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SOLUTION: The optical transmitter includes a

semiconductor laser drive circuit 1, and a semiconductor laser 4 for generating and outputting modulated laser light based on the modulation current of the semiconductor laser drive circuit 1. In the above optical transmitter, a phase difference adjustment circuit 2 is provided in the pre-stage of the semiconductor laser drive circuit 1, so as to reduce a phase difference produced between data signals. The phase difference adjustment circuit 2 includes an impedance control line 5, a resistor element 7 having a parasitic inductance component (or an inductor having a parasitic resistance component), and a DC cutoff capacitor 8.



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- 3.In the drawings, any words are not translated.

#### CLAIMS

[Claim(s)]

[Claim 1]

In an optical transmitter provided with a semiconductor laser driving circuit which operates an inputted signal wave form of a data signal orthopedically, and a semiconductor laser which carries out the generation output of the modulated laser light based on a modulated current flow which this semiconductor laser driving circuit outputs,

An optical transmitter equipping the preceding paragraph of said semiconductor laser driving circuit with a phase contrast equalization circuit for reducing phase contrast generated between data signals.

[Claim 2]

Said phase contrast equalization circuit.

The transmission line which transmits said data signal to said semiconductor laser driving circuit, A series resonant circuit connected to said transmission line.

A preparation.

Said series resonant circuit.

An inductor which has a resistance element which has a parasitic inductance component, or a parasitic resistive component.

A capacitance device.

The optical transmitter according to claim 1 characterized by preparation \*\*\*\*\*\*.

[Claim 3]

The optical transmitter according to claim 1 or 2, wherein said series resonant circuit is connected to an input side or an output side of said transmission line.

[Claim 4]

An optical transmitter of any one statement of claim 1-3 which said transmission line is a differential line and is characterized by connecting said phase contrast equalization circuit to each of this differential line.

[Claim 5]

An optical transmitter of any one statement of claim 1-3, wherein said transmission line is a single phase track.

[Claim 6]

An optical transmitter of any one statement of claim 1-5, wherein said transmission line is a micro slip track.

[Translation done.]